

# **Biometric Interoperability, Performance, and Assurance Working Group Kick-Off Meeting Notes**

## **1. Introduction**

The Biometric Interoperability, Performance, and Assurance Working Group kick-off meeting was held on 12 September 2000, 8:30 AM – 4:00 PM, at the NIST Administration Building in Gaithersburg, MD. The meeting attendees are listed in the appendix.

## **2. Agenda**

Fernando L. Podio, Co-Chair of the Biometric Consortium, presided over the meeting. Below is the agenda for the one-day session:

Introductions and Mission Statement

Draft Agenda Review

### ***Assurance Session***

Introduction and Review of Existing Initiatives

Presentations:

- Draft Biometric Protection Profile Discussion – Mr. Phillip Statham, CESG
- NIAP 2000 – Tim Grant, NIST
- DoD Biometrics Management Office – Bob Kocher

Brainstorming of Issues, Identification of Addressable Issues, & Action Item Assignment

### ***Interoperability Session***

Introduction and Review of Existing Initiatives

Presentations:

- Life After BioAPI v1.0 – Ms. Cathy Tilton, SAFLINK
- TeleTrust – Brigitte Wirts, Infineon

Brainstorming of Issues, Identification of Addressable Issues, & Action Item Assignment

### ***Performance Session***

Introduction and Review of Existing Initiatives

Presentations:

- Biometrics Performance Testing Best Practices – Dr. Tony Mansfield, NPL
- National Research Council of Italy & Research at the Advanced Metrology Lab – Dr. Mario Savastri
- HumanID Standards Framework for Heterogeneous Databases & Standards – Dr. Jonathon Phillips  
DARPA
- Membership Agreement Review – Mr. Mark Madsen, NIST

Brainstorming of Issues, Identification of Addressable Issues, & Action Item Assignment

### ***Wrap Up and Action Item Review***

## **3. Discussions and Briefings**

The goals of the Working Group (WG) were reviewed. The Working Group is a Forum for industry, users, and developers to broaden the utilization and acceptance of biometric technologies, facilitate and encourage further exchange of information and collaborative efforts between users and private industry in all things biometric, and to support advancement of technically efficient and compatible biometrics technology solutions on a national and international basis. The purpose of this Working Group is to support advancement of technically efficient and compatible biometrics technology solutions on a national and international basis by addressing required issues and efforts other than current and on-going developments already undertaken by other national or international organizations (e.g., formal standards bodies, industrial consortium developments, and on-going testing efforts). A preliminary list of topics includes: (a) User requirements on assurance, interoperability, performance, and standards; (b) Metrology for performance and interoperability; (c) Biometric data interchange; (d) Quality; and (e) Assurance (e.g., protection profiles). Part of the WG's goal is to understand and augment the efforts of other users or industrial groups, as needed, e.g., BioAPI. The work will be conducted by identifying and addressing issues, especially those that are not being addressed by other groups.

Continued participation in the BC Working Group (BC WG) will require signing a Membership agreement with NIST. Membership is open to corporations, organizations, cooperatives, state and local governments, academic institutions, federal agencies and their authorized contractors, and other users of biometric technologies, including self employed or self financed individuals.

Organizations that sign the membership agreement are considered Members of the BC WG. A membership agreement can be downloaded from the BC WG web site: [www.nist.gov/bcwg](http://www.nist.gov/bcwg)

### **Membership agreement**

Mr. Mark Madsen of the Director's Office, NIST fielded questions from the meeting attendees regarding the legal aspects of the WG membership agreement. **(A revised Working Group membership agreement was prepared after the meeting. It can be downloaded from the web site: [www.nist.gov/bcwg](http://www.nist.gov/bcwg))**

### **Assurance Session**

Existing initiatives in the biometrics assurance arena were discussed. A Biometric protection profile is being developed by the UK Biometrics Working Group (BWG). The International Biometric Group is currently testing devices for performance (finger, face, and voice devices). BioTrust is conducting interoperability testing. There is also a biometrics assurance effort called "Face Recognition Vendor Test 2000," which will evaluate a number of facial recognition products.

Briefings related to biometrics assurance were given. Mr. Phillip Statham of CESG gave a general overview of the Common Criteria and Protection Profiles, and specifically discussed the Biometric Protection Profile being developed by the UK BWG. Mr. Tim Grant of NIST introduced the National Information Assurance Partnership (NIAP) - a partnership between the National Institute of Standards and Technology (NIST) and the National Security Agency (NSA). NIAP's purpose is to meet the security testing needs of information technology (IT) producers and consumers. Mr. Kocher introduced

the DoD Biometrics Management Office. This office provides the military user an edge in all operational environments through the use of biometric systems and technologies. Mr. Kocher also discussed the Biometrics Fusion Center which interfaces with the DoD Biometrics Management Office. He stated that after products are certified by the Biometrics Fusion Center, they could be integrated into DoD systems.

After the briefings, there was a discussion period where several issues were raised. There was a discussion about whether or not this WG should give guidance for other groups or develop standards, e.g., developing standards or guidance for implementing biometrics and ensuring they are safe to use. The WG should provide liaisons to other organizations, e.g., NIAP, BMO, and the BWG. The WG should look at developing methods to determine and verify the accuracy of statistical claims by vendors. The WG should also address issues related to the PKI community, e.g., how to integrate biometric technologies into PKI and smart cards. The WG needs to specify and give guidance for testing biometric devices. There is also a need to develop ways to guarantee a biometric device is a trusted device. The WG needs to address getting harmonization between standards and guidelines that already exist. Several questions were raised in this session such as: How do you test a tightly integrated system vs. a standards based system? Should the applications and all technologies that work with the application be certified? Or do the technologies get their own certification to work with a particular application? For example, how do you certify a telephone voice identification system that works with cell phones and land-line phones? Should the WG only deal with biometrics or should the WG widen its scope to include devices with which biometric devices interoperate?

Addressable issues in the biometrics assurance arena were identified by the WG. The WG plans to investigate how biometrics interact with PKI and smart cards, determine methods to verify statistical claims, and provide liaisons to other biometric groups. Additionally, a Biometric Assurance Ad-Hoc Group was formed to review and evaluate UK Biometric Protection Profile and related efforts. This group will prepare comments on the UK protection profile to assist the UK Biometric WG. Participants that expressed interest in joining the Ad-Hoc Group are noted in the attendees list that appears as an appendix below.

## **Interoperability Session**

Briefings related to biometrics interoperability were given. Mrs. Cathy Tilton of SAFLINK discussed the BioAPI standard which is an industry consensus, open system standard. Ms. Brigitte Wirts discussed TeleTrust. TeleTrust is an organization in Germany that has several working groups focused on assurance issues such as biometric identification systems, public key infrastructure, etc. TeleTrust's biometric working group is called BioTrusT. There was a discussion that revolved around BioAPI. There is no BioAPI conformance test suite available (the BioAPI is developing one). Currently, a vendor's statement of compliance is used.

There was a general discussion about interoperability. The concept of bringing together several standards to develop a single common approach for biometrics interoperability needs to be explored and promoted by this WG. There is an issue regarding interoperability between platforms. BioAPI is an

open standard that is operating system independent (the current reference implementation is Win32, migration to other OS is planned.) More information on the BioAPI Consortium can be found at the BioAPI web site: [www.bioapi.org](http://www.bioapi.org)

## **Performance Session**

Briefings related to biometrics performance were given. Dr. Tony Mansfield discussed the “*Best Practices for Biometrics Performance Testing*” document. This document provides a baseline for test protocol development. The document will also lead to more uniform test practices that will allow for the comparison of results across tests. Dr. Jonathon Phillips of DARPA discussed the HumanID Standards Framework for heterogeneous databases and standards. Dr. Mario Savastano discussed the biometric research conducted by the National Research Council of Italy and the Advanced Metrology Lab.

After the briefings, there was a discussion about biometric testing. The WG should track all the existing biometric testing efforts. Specifically, the group should be aware of the testing efforts of companies and organizations and the results of their tests (if released). The first WG contribution will be to prepare comments of the Best practices guidelines discussed above. An Ad-Hoc Testing Group was formed to research ongoing and planned testing efforts and to lead the editing of comments to the UK Best Practices Guidelines. Participants that expressed interest in becoming members of the Testing Ad-hoc Group are noted in the attendees list that appears as an appendix below.

## **4. Future Plans**

The next meeting is planned for February in Maryland. It will be a two-day meeting with time allotted to have ad-hoc group and plenary meetings. The WG will most likely continue to conduct meetings in conjunction with Biometric Consortium Conferences and other key Biometric-related events).

### **February Meeting**

**The next BC WG meeting will be held at NIST in Gaithersburg, MD, February 7-8, 2001. Building 222-Room B217-223 from 9:00 AM to 5:00 PM.**

**For more information please check the BC WG web site: [www.nist.gov/bcwg](http://www.nist.gov/bcwg)**

# APPENDIX A

The following individuals attended the kick-off meeting:

	<u>First Name</u>	<u>Last Name</u>	<u>Organization</u>
*+	Carolyn	Bainer	DoD Biometrics Management Office (BMO)
	Danny	Chu	Keyware
	Tamara	Cleveland	Booz· Allen & Hamilton
	William J.	Cole	HQ FORSCOM
	Paul	Collier	Biometrics Foundation
	Frank	Deckelman	ONR
	Russell	Deich	BAE SYSTEMS
	Ted	Dunstone	Biometix
+	Allen	Farenhem	Biolink
	Jay	Fields	Dept. of State
	Dan	Fireman	Sagem Morpho
	Shelby A.	Fowler	DoD BMO DISC4/MITRE
	Dennis	Fringeli	Booz· Allen & Hamilton
	Edward	German	US Army
	Tim	Grance	NIST
	Dave	Guerrino	DoD BMO
	Marc A.	Guzman	Citigroup
	Walter G.	Hamilton	SAFLINK
	Fred	Herr	Unisys
+	Kathy	Higgins	Higgins & Associates, Int'l
+	Peter T.	Higgins	Higgins & Associates, Int'l
	Peter S.	Jamzer	DoD BMO
	Richard K.	Johnston	Scientific Research Corporation
	George I	Kiebusinski	Mitretek
	Hakil	Kim	INHA University
*	Matthew D.	King	Booz· Allen & Hamilton
	Bob	Kocher	DoD BMO/STS
	Terry	Losonsky	NIAP
	Alvin	Mack	USASC
+	Tony	Mansfield	NPL
	Judith	Markowitz	J. Markowitz Consultants
	R. Michael	McCabe	NIST
	Eric	Milne	PITO
*+	Dave	Morgan	DoD BMO/STS
*+	Samir	Nanavati	International Biometric Group
*+	Dr. Mike	Negin	MNEMONICS, INC.

	Vy H.	Pham	U.S. Army
+	Jonathon	Phillips	DARPA
	Fernando	Podio	NIST
	Steven R.	Pomerantz	Kaiser Permanente
	Clive A.	Reedman	UK Police Info. Tech. Org.
	Dan	Riley	Veridicom
*+	Rich	Roth	CTI
	Dr. Mario	Savastano	CNR Nat'l Research Council of Italy
*+	Greg	Schmidt	Mytec Technologies Inc.
	Colin	Soutar	Mytec Technologies Inc.
*	Philip N. M.	Statham	CESG
	Dr. Pauli	Tikkanen	Nokia Mobile Phones
	Cathy	Tilton	SAFLINK
	Michael	Trapani	Digital Persona
*	Dr. Valorie	Valencia	Authenti-Corp
+	Lee	Vannes	Booz· Allen & Hamilton
	Mark A.	Visbal	Security Industry Association
	Keith	Weir	DoD BMO/STS
	Ian S.	Williams	Datacard AAMVA IAB
	William	Windsor	GSA/TFS
*+	Brigitte	Wirtz	Infineon
	Michael T.	Yura	W. Va. University

\*Participants that expressed interest in becoming members of the Assurance Ad-Hoc Group

+ Participants that expressed interest in becoming members of the Testing Ad-Hoc Group